IN THE CLAIMS:

Please amend claims 1-5, 8-22, 24-26, and 37-40 to read as follows:

Sub C1 B1

1. A polysaccharide-protein conjugate or oligosaccharide-protein conjugate that elicits protective antibodies wherein said conjugates comprise an N-propionated saccharide directly coupled to a protein at a β-position of a propionate moiety, and wherein the N-propionated saccharide is de-N-acetylated and N-acryloylated at the de-N-acetylated terminus.

2. The conjugates according to claim 1 wherein the protein comprises at least one lysine or cysteine residue.

3. The conjugates according to claim 1 wherein the saccharide is derived from a polysaccharide obtained from bacteria, yeast, cancer cells, or is chemically synthesized.

4. The conjugates according to claim 1 wherein the the saccharide is derived from a polysaccharide obtained from *Escherichia coli*, Meningococcus, Pneumococcus, Streptococcus, Haemophilus, Neisseria, Salmonella, Klebsiella, or Pseudomonas.

5. The conjugates according to claim 1 wherein the saccharide is derived from a polysaccharide obtained from group B *Streptococcus* selected from the group consisting of type Ia, type Ib, type II, type III, type V, type VIII, and combinations thereof.

Sub C2 B2

8. The conjugates according to claim 1 wherein the protein is selected from the group consisting of tetanus toxoid, diphtheria toxoid, a *Neisseria meningitidis* outer membrane protein, pneumolysoid, C-β protein from group B *Streptococcus* and non-IgA-binding C-ß protein from group B *Streptococcus*.

9. The conjugates according to claim 8 wherein the protein is recombinantly produced.

10. The conjugates according to claim 9 wherein the protein is recombinant *N. meningitidis* outer membrane protein.

11. The conjugates according to claim 1 wherein the saccharide comprises a glycosaminoglycan.

Sub Cy

12. The conjugates according to claim 1 wherein the saccharide comprises glycosyl residues of a structural repeating unit having at least one free amino group or N-acyl group.

13. The conjugates according to claim 12 wherein the glycosyl residue is selected from the group consisting of glucosamine, galactosamine, mannosamine, fucosamine and sialic acid.

B1

14. The conjugates according to claim 1 wherein the N-propionated saccharide is directly coupled to an ε-free amino group of a lysine residue or a thiol group of a cysteine residue of the protein.

15. A polysaccharide-protein conjugate or oligosaccharide-protein conjugate comprising an N-propionated group B *Streptococcus* type III polysaccharide-tetanus toxoid conjugate.

16. A polysaccharide-protein conjugate or oligosaccharide-protein conjugate that elicits protective antibodies produced by a method comprising:

A) de-N-acetylating an isolated polysaccharide or oligosaccharide using a de-N-acetylating reagent to form a de-N-acetylated polysaccharide or a de-N-acetylated oligosaccharide,

B) N-acryloylating the de-N-acetylated polysaccharide or the de-N-acetylated oligosaccharide at a de-N-acetylated terminus with an acryloylating reagent to form an N-propionated polysaccharide or an N-propionated oligosaccharide, and

C) directly coupling at a β-position of a propionate moiety of the N-propionated polysaccharide or the N-propionated oligosaccharide to a protein to form the polysaccharide-protein conjugate or the oligosaccharide protein conjugate.

17. The conjugates according to claim 16 wherein the polysaccharide or oligosaccharide is obtained from bacteria, yeast, or cancer cells or is chemically synthesized.

18. The conjugates according to claim 16 wherein the coupling is conducted at a pH of about 7.0.

Sub C2

19. The conjugates according to claim 16 wherein the coupling is conducted at a pH above 9.

B2

20. The conjugates of claim 16 wherein the coupling is conducted in a reagent selected from the group consisting of phosphate buffer, bicarbonate buffer, and borate buffer.

21. The conjugates according to claim 16 wherein the de-N-acetylating reagent is a base or an enzyme and the acryloylating reagent is selected from the group consisting of N-acryloyl chloride, acryloyl anhydride, acrylic acid and a dehydrating agent.

22. A pharmaceutical composition comprising the conjugates according to any one of claim 1 or claim 16 and a pharmaceutically acceptable carrier.

24. The pharmaceutical composition according to claim 23 wherein the adjuvant is selected from the group consisting of alum and stearyl tyrosine.

B3

Sub C3

25. The pharmaceutical composition according to claim 22 further comprising a second component, said second component selected from the group consisting of diphtheria-tetanus-pertussis (DTP), diphtheria-tetanus-acellular pertussis (DTaP), tetanus-diphtheria (Td), diphtheria-tetanus-acellular pertussis-*Haemophilus influenzae type B* (DTaP-Hib), diphtheria-

tetanus-acellular pertussis-inactivated poliovirus-*Haemophilus influenzae type B* (DTaP-IPV-Hib), and combinations thereof.

26. An immunogen comprising the conjugates according to any one of claim 1 or claim 16, said immunogen elicits a polysaccharide-specific or an oligosaccharide-specific immune response.

37. A vaccine comprising the conjugates according to any one of claim 1 or claim 16, wherein said vaccine provides protective immunity against at least one member of a genus of an organism from which the polysaccharide or oligosaccharide component of the polysaccharide-protein conjugate or oligosaccharide-protein conjugate was obtained.

38. The vaccine according to claim 37 wherein the organism is selected from the group consisting of bacteria and yeast.

39. The vaccine according to claim 38 wherein the bacteria is selected from the group consisting of *Escherichia coli*, Meningococcus, Pneumococcus, Streptococcus, Haemophilus, Neisseria, Salmonella, Klebsiella, and Pseudomonas.

40. The vaccine according to claim 37 further comprising a second immunogen in combination with the polysacharide-protein conjugate or oligosaccharide-protein conjugate said second immunogen selected from the group consisting of DTP, DTaP, Td, DTaP, Hib, DTaP-IPV/Hib and combinations thereof.